

UNIVERSITI TEKNOLOGI MARA

**FACTORS PROMOTING KNOWLEDGE
SHARING BEHAVIOR USING VIRTUAL MODE
AMONG RESEARCHERS IN GOVERNMENT-
LINKED COMPANIES**

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AUTHOR'S DECLARATION

I declare that the work in this thesis is carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.


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ABSTRACT

Knowledge sharing is recognized as an important facet in the Knowledge Management (KM) process. As an essential tool for the successful implementation of KM, knowledge is considered the most important resource that an organization possesses. Previous researchers have defined knowledge sharing as the process through which one group, department, or division is affected by the experience of another. Presently, people are using virtual modes and web-based technologies, including Internet, Intranet, social media and other online technologies, through which knowledge can be extracted, shared and distributed globally. Promoting knowledge sharing behavior is a challenge for most knowledge-savvy organizations, including research organizations. In developing a behavior that values and practices knowledge sharing, factors to be considered are social, organizational, user attitudes and technical components of this behavior. Previous studies on knowledge sharing have cited various gaps or barriers to knowledge sharing, which include functional silos, individualism, ineffective means of knowledge capture, inadequate technology, internal competition and managerial gaps in the organization. The purpose of this study is to evaluate factors that can promote and strengthen the knowledge sharing behavior for the researchers through the virtual platforms. Previous theories and models, namely Theory of Reasoned Action, Technology Acceptance Model, DeLone and McLean IS Success Model, and Unified Theory of Acceptance and Use of Technology, were used to develop the conceptual framework of this current research. Based on relevant theories and framework, this research had proposed five important predictors or key success factors for promoting knowledge sharing behavior: performance expectancy, effort expectancy, social influence, facilitating condition, and attitude towards knowledge sharing. This research used a quantitative methodology for the collection and analysis of data by conducting a questionnaire survey. Self-administered questionnaire was distributed to 510 respondents from five Research and Development organizations from selected Government-Linked Companies (GLCs). These research organizations were selected as respondents because they represent major GLCs that host the largest number of researchers with technical expertise from energy sectors. A total number of 220 questionnaires were returned, but only 201 were valid for analysis. This study had employed various types of multivariate analysis, namely Structural Equation Modeling (SEM) and Multivariate Analysis of Variance (MANOVA) analysis using SPSS and AMOS version 19. The results of Confirmatory Factor Analysis (CFA) had stated that the several fit indices satisfy the recommended range of value, which assumed the model development to be acceptable. The findings also showed that all independent variables (performance expectancy, effort expectancy, social influence, facilitating condition and the users' attitude) indicated a positive association with the virtual knowledge sharing behavior. Furthermore, the findings of this study revealed that the effects of knowledge sharing behavior through the virtual platforms were moderated by gender and research organization. Consequently, this study had suggested these factors in promoting and strengthening the implementation of knowledge sharing using the virtual platforms for the respective research organizations.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The recent emergence of globalization has been characterized by uncertainty and continuous change in society, economy, and technology. This rapid and dynamic change has forced major organizations, accustomed to structure and routine, to adapt in order to compete and improvise rapid solutions correctly (Hildreth & Kimble, 2004). Competitiveness is no longer centered on physical assets and financial capital, but on effective routing of successful business growth and longevity where human capital pushes organizations toward a higher capacity of learning and innovation (Phusavat et al., 2010). This resource-based view of competitiveness has been highlighted by Drucker (2001), who indicates that competing companies must have the ability to divert from tangible to value-based measures that focus more on organizational internal resources. Recognizing these competitive changes, many companies are moving toward a structure based on rising organizational internal resources, such as network and virtual communities. In relation to this, Kimble, Li, and Barlow (2000) have asserted that increased competitiveness should also bring an incremented need for internal knowledge management and sharing initiatives.

Knowledge management (KM) has been widely initiated and practiced in various organizations around the world. The KM initiative comprises a range of strategies and approaches to identify, develop, acquire, transfer, share, and enable adoption of wisdom and experiences, by either individuals or organizations (Hairoladenan, Raja Abdullah & Rozi, 2013). KM's definition has been suggested by several academicians, including Argote et al. (2000) and Huber (1991), who refer to KM as how organizations create, retain, and share knowledge. Landline and Zollo (2007) have described KM as the methods of developing, capturing, and adopting knowledge to enhance organizational performance. These scholars have also asserted this initiative as a range of approaches and procedures exploited by businesses to determine, represent, and transfer information,